## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Date

October 11, 2000

Hitoshi Kihara et al.

Our Docket :

SHX 314

For

APPARATUS, METHOD FOR ENRICHMENT OF THE HEAVY

ISOTOPE OXYGEN AND PRODUCTION METHOD FOR HEAVY

OXYGEN WATER

Assistant Commissioner for Patents **BOX PATENT APPLICATION** Washington, D.C. 20231

Sir:

## PRELIMINARY AMENDMENT

Preliminary to the review of the above identified application, please enter the following amendments.

## In the claims:

Please cancel claims 1-11, without prejudice.

Please add new claims 12-36, as follows.

--12. An apparatus for separation of a vapor or liquid mixtures comprising a plurality of components using a plurality of distillation columns (a first column to an n<sup>th</sup> column) constructed in a cascade comprising:

introduction conduits which connect the bottom of a  $k^{th}$  column ( $1 \le k \le (n-1)$ ) or an outlet of a reboiler provided in the vicinity of the bottom of the  $k^{th}$  column to the top of a  $(k+1)^{th}$  column, an inlet of a condenser provided in the vicinity of the top